

Remarks

The Applicant acknowledges the allowance of claims 14, 15, and 17-21. The also acknowledges the indication that claims 4, 5, 7, and 9 would be allowable if rewritten in independent form including the limitations of the base claim and any intervening claims.

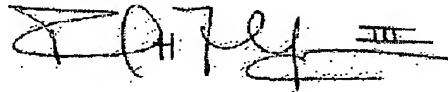
The Examiner has rejected the remaining claims based on US Patent 6,748,797 to Breed. The Applicant does not see a need at this time to investigate the availability of a 131 declaration to remove Breed as a reference because Breed is concerned with detecting thermal radiation and is thus unrelated to the claimed invention.

The system disclosed by Breed teaches the use of an infrared radiation receiver. Col. 7, lines 9-10. Infrared radiation is not composed of airborne molecules as recited in the pending claims. The Applicant respectfully traverses the Examiner's interpretation set forth in paragraph 2 of the final office action wherein the Examiner reads thermal radiation as meeting the "airborne molecule" limitation of the claims. Thermal radiation is not composed of molecules and nothing in Breed discloses or teaches otherwise. In classical physics, electromagnetic radiation is a mass-less particle of energy described by a wavelength. On the other hand, a molecule is an assembly of mass particles and can be described by a molecular weight. Although Einstein's famous equation $E=mc^2$ relates mass to energy, the two remain separate entities. As described in the specification, the claimed device would measure the chemical makeup or molecular weight of airborne molecules to determine the presence or absence of

particular hydrocarbons or other molecules (mass particles), irrespective of their temperature. The Breed invention does no such thing. Breed cannot determine the character of any mass particles other than their temperature, and is concerned only with the temperature of the tires. Breed is concerned exclusively with thermal radiation, even including lenses for the purpose of directing these electromagnetic photons to sensors that do not have direct field of view of a particular tire. Lenses would be of no use for sensing airborne molecules (they would likely stop such molecules from reaching a sensor). The claimed invention and Breed are thus fundamentally different. The Applicant thus submits the claims are patentable over the Breed reference regardless of whether Breed is applied alone or in combination.

In view of the foregoing, the Applicant respectfully requests reconsideration of the claims and most earnestly solicits the issuance of a formal Notice of Allowance for the pending claims.

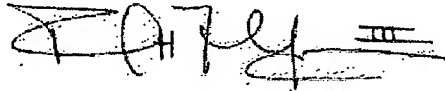
Please call the undersigned attorney if any issues remain after this amendment.



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I hereby certify that this correspondence (10 page Remarks after Final in application serial no. 10/600,796 filed 6-20-2003) is being deposited with the United States Postal Service as first class mail (with sufficient postage) in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, OR is being transmitted by facsimile to 703-872-9306 on May 16, 2005.



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